# Olympic National Forest Wildland Seed Collection

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# Interview with Cheryl Bartlett by Alexa Pengelly, July 2016

Did you know the US Forest Service collects native seeds? Saving and growing seed from native plants helps us restore areas that have been disturbed or that need rehabilitation or enhancement. I caught up with Cheryl Bartlett, Olympic National Forest Botanist, to ask her a few questions about her seed collection projects.



# A: Who actually collects the native seeds and how are they collected?

**C:** Right now, myself, and other Forest Service employees are doing the bulk of the seed collecting. Sometimes we'll hire a contractor to do seed gathering. We are also working on coordinating volunteers from a few key stakeholder groups to help collect seed from some of our native shrub species.

Most of the time we hand collect the seed directly by manually cutting it off the plant. Sometimes we have to put a cloth bag over the ripening fruit (as with the lupine in the photo)



Capturing native seed from Lupine at Dennie Ahl Seed Orchard in Olympic NF.

because when the seed is finally ripe, the seed pods pop open and shoot the seeds away from the plant. A great strategy for dispersing seeds if you're a plant, but not so great if you're a human trying to collect it!

Before we do any collecting, several good source populations have to be located in the same "seed zone." A seed zone is an area similar enough ecologically and climatically that seed collected from plants located within the same zone can be transferred anywhere within it and still have a high likelihood of being adapted to conditions there. More than one collection site is ideal to further increase the likelihood of having seeds that are a

good mix, genetically, and to decrease the pressure on the populations we're collecting from.

Once seed is collected, it is cleaned and packaged for storage. We usually have this done in Oregon at the <u>Bend Seed Extractory</u>, a Forest Service facility dedicated to this kind of work. In fact, they process upwards of 15,000 pounds of seed per year from more than 2,700 species from across the Nation!



### A: What seeds do you collect on the forest and why?

**C:** Here on the Olympic National Forest we collect a variety of seed, based on what the needs are. Right now, we've been doing a lot of collecting of a variety of species for the pollinator habitat enhancement project at Dennie Ahl Seed Orchard.

Most native seed is collected May – August. The timing depends on what species and at what elevation we are collecting. The same species will develop seed earlier at lower elevations than at higher elevations. Other species, such as like goldenrod, flower very late, so September is usually the best time to collect that one.

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Many seeds can be wild collected, cleaned, and then stored for later use. However, wild collecting seed is a time consuming and labor intensive process and can put pressure on local native plant populations if too much seed is collected. However, for some native species, larger quantities of more affordable seed can be acquired sustainably by establishing seed increase fields grown from a relatively small amount of wild collected seed.

A lot of our seed increase is done at <u>Forest Service nurseries in</u> the region, but contractors and other facilities also do this type of work for us to meet increasing demands for ecosystem restoration. In the past, most seed increase was done with native grasses, but with the recognition of the importance of pollinators on our landscapes, more seed of native flowering plants, and a wider variety of species, are now being grown.



Last year, we collected Pearly Everlasting, Goldenrod, and Yarrow seed to develop a pollinator friendly "workhorse" seed mix for drier, sunny sites on the Forest. We had the seed cleaned, and we then sent it to J Herbert Stone Nursery in Medford, OR, for production. Right now I'm also working on developing another mix that can be used at cooler, more shaded sites.





Olympic National Forest seed increase fields at J Herbert Stone Nursery (2016)

Olympic National Forest seed increase fields down at J Herbert Stone Nursery in Medford, Oregon are doing fantastic this year! Each field was grown from just a few ounces of foundation seed collected on the Olympic National Forest last year and, depending on the species, will produce – several pounds of seed per ounce of foundation seed sown.

# A: Why are you excited about this year's seed increase fields at J Herbert Stone Nursery?

**C:** We will have seed available of goldenrod, pearly everlasting and yarrow to use on the forest starting this fall! These are all really good plants for pollinators, provide erosion control and are competitive with weeds. The seeds produced at the nursery are used in projects that involve any sort of ground disturbance, and to re-vegetate these areas.

Foundation seed for the production fields at J Herbert Stone Nursery was collected on the west side of the forest for all three species; and for goldenrod and pearly everlasting in the SE corner of the forest. We're still working on the NE corner, but plans to increase beds established for seed zones in that corner of the Olympic National Forest soon.